

Special Issue

Advances in PDEs, Infinite-Dimensional Dynamical Systems and Numerical Dynamics

Message from the Guest Editors

Partial differential equations (PDEs) fundamentally model complex phenomena in science and engineering, generating infinite-dimensional dynamical systems with behaviors such as pattern formation, chaos, and long-term evolution on attractors. Stochastic PDEs (SPDEs) further describe systems influenced by randomness, with solutions in Hilbert or Banach spaces. Numerical dynamics focuses on whether numerical schemes faithfully reproduce key dynamical features—especially long-term behavior—in both dissipative systems with attractors and non-dissipative Hamiltonian systems. This Special Issue invites research and reviews advancing the analysis of PDEs, SPDEs, infinite-dimensional dynamics, and numerical methods. Topics include well-posedness and stability; stochastic integration and invariant measures; attractors, hyperbolicity, and bifurcations; structure-preserving schemes and numerical attractors; and applications in fluid mechanics, quantum physics, and mathematical biology.

Guest Editors

Dr. Shuang Yang
Dr. Renhai Wang
Dr. Rodiak Figueroa-López

Deadline for manuscript submissions

31 October 2026



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 5.4



mdpi.com/si/263873

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 5.4



[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)



About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.4 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2026).